Suspected Cyanide Intoxication/Smoke Inhalation

PPE AS INDICATED FOR RESCUE.
Remove patient from source of exposure. Patients exposed to cyanide gas/vapor or smoke, do not require decontamination and do not off-gas cyanide or CO. If cyanide solution or powder on patient, decontaminate. If cyanide ingestion, vomitus/gastric aspirate may off-gas. Have suction ready and consider at least Level C respiratory protection (with CBRN cartridge), gloves and splash protection. Ventilate transport unit well. Sequester vomitus in suction container or plastic bag.

Assessment:

Smoke Inhalation:

Airway / Breathing
Circulation - BP / perfusion
Neurological – AVPU or GCS, Confusion / disorientation / altered LOC, pupil size/reactivity
Soot in nose / mouth / oropharynx

Other suspected cyanide exposure/ingestion:

Airway / Breathing
Circulation - BP / perfusion
Neurological – AVPU or GCS, Confusion / disorientation / altered LOC, pupil size/reactivity
Oropharyngeal chemical burns/irritation

Other assessment:

Carbon Monoxide Co-oximetry (if available)
(Pulse oximetry SO2 will not be reliable in CO or CN poisoning.)

Treatment: Based on Clinical Severity

For all patients:
100% O2 by mask or BVM. Assist ventilation as needed. Consider intubation in comatose or arrested patients.
Initiate IV / NS @ TKO. Collect blood sample via purple top tube (if available).
Spinal immobilization as indicated if evidence of trauma/fall.
Treat burns and other presenting symptoms as indicated

Mild Exposure:
(Soot in nose / mouth / oropharynx, otherwise alert and stable): no other treatment, transport to appropriate facility

Moderate Exposure:
(Soot in nose / mouth / oropharynx, Confusion / disorientation / altered LOC, ± Hypotension):
Monitor ECG
Administer hydroxycobalamin (Cyanokit) 5g IVpgb over 15 min., (pediatric dose 70 mg/kg up to 5 g, IVPB over 15 minutes), on scene or en route
If hypotensive, consider fluid challenge
Contact Medical Control

Transport to appropriate facility

Severe Exposure:
(Soot in nose / mouth / oropharynx, coma / respiratory or cardiac arrest, hypotension)
Administer hydroxycobalamin (Cyanokit) 5g IVpgb over 15 min., (pediatric dose 70 mg/kg up to 5 g, IVPB over 15 minutes), on scene or en route
If in respiratory or cardiac arrest begin CPR, administer ACLS meds through separate IV
If hypotensive, consider fluid challenge
Contact Medical Control
Transport to appropriate facility

Transport:
Moderate to severe burns to burn center
Priority one trauma to trauma center
CO co-intoxication is common in smoke inhalation, consider transport to hyperbaric center.
Other unstable patients to closest facility